THE VETERINARY RECORD

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Mr. JAMES CLARK.

The death, last Thursday week, of Mr. Clark leaves the ranks of veterinary practitioners poorer. He had made for himself a very large practice not only in and around Coupar Angus but over a wide district of Scotland. His judgment was remarkably sound, and his reputation extended throughout his profession to such an extent that men even in the South of England were only too glad to be allowed to send their sons to him for practical instruction. Mr. Clark was not only a first-class practitioner but he possessed the ability to transfer his knowledge to others, and was never more happy than in showing and explaining cases to his pupils. He was a born clinical teacher, and many of our younger members will ever remember with gratitude the help he afforded them in obtaining clinical knowledge.

Mr. Clark took his Fellowship in 1887 and was elected a Member of the Board of Examiners in 1891. He was re-elected at the Council meeting only last month. For some months he had been ailing, but it was hoped that he would shake off his illness which was not diagnosed with certainty until recently, when it was known to be Bright's disease. He was a brilliant practitioner, a sound examiner, and an honest, genial friend.

MAGISTERIAL DICTA.

In an extract we publish this week, but from which the names of the veterinary surgeons are deleted, it will be noticed that a London magistrate ventured to lecture one of the expert witnesses as though their could be no doubt of his error. The magisterial remarks were apparently founded on the common notion that because a horse is lame it must be suffering pain. This is not an uncommon delusion, and a somewhat similar dicta was given by the late Mr. Montagu Williams when he was a stipendiary magistrate. "If" they seem to say "a horse is lame, he must be in pain." Although we allow that in perhaps 80 per cent. of cases this is true, there are so large a proportion of cases in which it is not true that even the ignorance of magistrates cannot excuse them for acting upon the error. No human being understands everything, and a recognition of this infirmity ought to have the effect of making magistrates hesitate before insulting witnesses who are as honest as themselves and a little more informed on the matters in dispute. Some day a flagrant case of undeserved reflection upon the evidence of a veterinary witness should be laid before the Home Secretary—not that it would have much effect upon a magisterial egoist, but that it might lead to a recognition of the fact that even stipendiaries are not infallible.

DIAGNOSIS.

Very frequently we notice writers or essayists calling attention to the difficulties which attend diagnosis in veterinary practice. The disadvantage under which the veterinarian is placed, in having to rely upon objective symptoms only, without the assistance of the subjective symptoms which so often guide the human surgeon, has been referred to so often that some of us may be inclined to think the repetition wearisome. Personally, we scarcely think it would it possible to point out the difficulties of diagnosis too frequently, or to emphasise them too strongly—either inside or outside the profession. While we educate the public as to the value of veterinary knowledge, we should also point out its limitations.

Some cases, of course, are easy to diagnose. Others, again, including not a few of those most commonly met with in practice, present difficulties which are often insuperable. Many lamenesses, and some abdominal affections, might be quoted as instances, and unfortunately these are subjects regarding which horseowners themselves often profess considerable knowledge, and are disposed to expect omniscience from the veterinary surgeon. Undoubtedly this tempts the practitioner to assume a confidence in diagnosis which he may be far from possessing, and it is regrettable that the temptation is not resisted more frequently.

It is said that owners have no confidence in a veterinary attendant who confesses uncertainty in diagnosis. This is true of some owners, but by no means of all. That it is true of so many is, we fear, to a great extent the fault of the profession. It cannot be denied that undue dogmatism on the part of some of our members has done not a little to foster the popular idea that a competent veterinary surgeon ought to be able to accurately diagnose any case at sight.

Old practitioners are often blamed for this assumption of infallibility, but we are not sure that the reproach is just. Of course some old men richly merit it—just as some young ones do. On the other hand there are many of our senior members, men with good practices and established reputations, who are never afraid to admit themselves in doubt. Probably they have lost clients by doing so, but we do not think that, in the long run, they have found the practice a disadvantageous one. Certainly, also, they have instilled some idea of what may fairly be expected from a veterinary surgeon into the minds of their clients, and thereby set an example which their younger colleagues would do well to follow. Failure to diagnose a disease or injury does not necessarily imply professional incompetence. It may, and frequently does, arise from the exercise of a wider knowledge of the possibilities of a case than is possessed by the expert in lightning diagnosis.

It would be to our advantage if this truth, which is fully recognised inside the profession, could be more widely disseminated amongst our clients—and each of us, in his own practice, may do something towards that end.

THE MOTOR ABROAD.

Last week we printed an extract from *The Pioneer* of Allahabad, from which it appears that the popularity of motor and electric traction in India has caused a re-

markable decrease in the number of horses imported by that country. This is only what was to be expected.

India possesses many good roads, and not a few wealthy inhabitants, and there is no doubt that the motor has now become indispensable in all civilized countries—to those who can pay for it. But it is by no means so certain that, for general commercial purposes, it will ever supersede or even seriously rival the horse. Regarding motors, as we must, as inimical to veterinary practice, it may fairly be said that, from our point of view, the outlook is more hopeful now than was the case a year ago. Motor traction does not seem to be gaining ground with regard to heavy haulage, while motor buses, which were expected to oust the horsed omnibus, are less numerous in London than formerly. Really, it seems that those who foretold the speedy extinction of horse-drawn vehicles prophesied too hastily.

ENZOOTIC OPHTHALMIA.

After reading Mr. Garnett's contribution in your issue of March 2nd on the above subject, I would like to give my own experiences of this disease amongst cattle. Mr. Garnett has not proved that the outbreak he saw was of a contagious nature, neither can I claim this definitely for mine. Short of actual experimental proofs I do not think this is possible. Still, the outbreak I had to deal with was enzootic and extremely persistent, and as no other cause could be found I was fain to think that it was of a contagious nature, everything pointing that way.

Eighteen months ago I had under my care about two thousand cattle, the property of the Transvaal Government. They were a mixed lot of Africanders and imported Texans, chiefly the latter. The Texans acclimatised badly and were subject to every ill imaginable, whilst the Africanders, given plenty of grazing, were hardly ever sick or sorry. It was a common remark amongst my conductors that if only we could change the Texans for Africanders what an easy time we should have.

At the time I took charge of the cattle a peculiar form of ophthalmia made its appearance, and persisted for a year until the cattle were eventually disposed of. The disease limited itself entirely, or practically so, to the imported stock and their progeny, the Africanders being apparently hardier and more resistent to it.

Symptoms.—A sudden profuse discharge of tears from one eye only, except in very rare cases. The affected eye was kept closed, the animal appearing to suffer very great discomfort, evinced by its disinclination to graze. In a few days the cornea became opaque and, unless the inflammation was checked, became ulcerated and the eyeball would burst. In some cases where no ulceration took place, the resolution left a big staring opaque eyeball, due to its distension with inflammatory exudate.

Treatment.—At first I resorted to cold water applications and ordinary eye lotions. This method I found slow and unsatisfactory, fresh cases cropping up before the other ones were convalescent, so that in a little while I had close on ten per cent. of the herd under treatment at the same time. I therefore looked round for an easier and more effective remedy, and after trying various I came to the conclusion that powdered alum was practically a specific for this affection. Method of application as follows. The affected animal was caught, the head turned on one side with the blind eye uppermost, and a large pinch of alum placed between the eyelids with the thumb and two fingers. The head was kept in position for about half a minute and then released. This treatment I found so effective that in all but severe cases one application only was necessary, and the treatment of this most troublesome outbreak became simplicity itself. The catching of the affected animals was the only difficulty, they were in many instances wild and untameable and when sick became irritable and often dangerous to approach. I have since used dry powdered alum in traumatic ophthalmia in equines with very beneficial effect.

F. J. Dunning, M.R.C.V.S.

Nylstroom, Transvaal.

THE TRYPANOSOMA EQUIPERDUM IN CANADA.

Pathologists will be interested in the information that the Trypanosoma Equiperdum has been found in a mare clinically affected with Dourine, or Maladie du Coit, at the Quarantine Station established by this Department at Lethbridge, Alberta, in 1904. The first demonstration was made by Drs. E. A. Watson and M. V. Gallivan on February 11th, 1907, in material taken from a vesicle on the mucous membrane of the vagina of the animal above referred to, which was found to be affected with Dourine on the premises of her owner, Mr. R. Tiffin, near Lethbridge, on December 21st, 1906, and subsequently removed to the Quarantine Station for the purpose of experimental observation.

The disease was successfully transmitted in February to a yearling filly, and the parasite subsequently observed in preparations from a fresh plaque. The finding was confirmed by Dr. C. H. Higgins, Pathologist of the Department, on March 21st, and was further observed in preparations taken by him on the 23rd and 25th of the same month.

The identity of Dourine, or Maladie du Coit, as seen on this continent and hitherto diagnosed by American and Canadian veterinarians from clinical manifestations alone, with the disease as known in Africa and Asia, as well as in Southern Europe, is thus fully established.

A detailed report of the discovery and of the work which led up to it, as well as of the steps subsequently taken, will be issued at the earliest possible date.

J. G. Rutherford,

Veterinary Director General.

Ottawa, April 19th.

ELEPHANTIASIS IN A PIG?

The enclosed photos were handed to me by a friend. They are of a pig three days old—one of a litter of ten.

Quite apparent in the photo is a proboscis through which the animal breathed, so I was informed; the natural nostrils being functionless. On the right side can be seen great distortion of inferior maxilla.

I thought it might interest some of the readers of your valuable paper.

J. R. Conchie (Vet. Student.)

RUPTURE OF THE GASTROCNEMIUS MUSCLE.

Seeing the recent translation of a case of rupture of the gastrocnemius muscle, I recall a somewhat similar one which I saw in East Africa. The subject was a native cow, which had been injured during the night. It was surmised that the injury had been caused by a heavy native bull on slippery ground.

My diagnosis was rupture of the gastrocnemius muscle of one hind limb at, or near, its two points of origin on the femur. Swelling of this region prevented me from ascertaining the precise *extent* of the injury, but, together with the action of the limb, sufficiently indicated its nature. The appearance of the animal when at rest was very similar to that represented in the photograph which appeared in *The Veterinary Record* of April 20. The hock, which was nearer the ground than is normal when the cow was standing, almost touched it when she attempted to walk. The tendon of the gastrocnemius was intact.

No treatment was attempted. The cow, who was with calf at heel, was allowed her liberty close to the farm buildings, and kept under observation for six weeks. At the end of that time she had to all appearance completely recovered.

Cadiot and Almy, in the third edition of their work, say "Muscular ruptures (partial) rapidly heal under the influence of rest, and, in general, no disturbance of locomotion remains."

Even when speaking of complete rupture of the gastrocnemius *tendon*, they assert that "spontaneous cure is possible in all classes of animals" (p. 310). They admit, however, that but little can be done to assist Nature in the healing of muscular ruptures (p. 288). In this case no treatment whatever was adopted, and natural recovery took place.

W. H. Flook.

ABSTRACTS FROM FOREIGN JOURNALS.

Clinical and Experimental Researches on Pernicious Anæmia in the Horse (Infective Typho-Anæmia), By H. Carré and H. Vallée At Research Laboratory of the Alfort School.

(*Continued from p. 697.*)

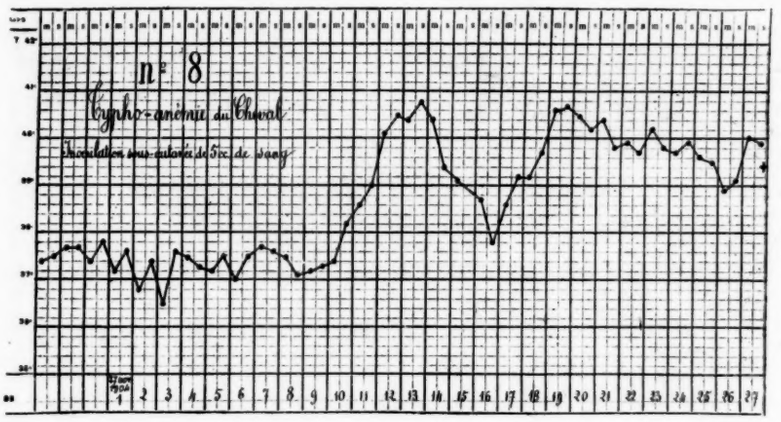
Inoculability.—For a very long time past breeders and veterinarians have agreed that the affection is contagious, and there is a generally received opinion in the infected districts tending to attribute the grave forms of the malady to a typhoid fever. This opinion seems to have been accepted by Lignières, who, without adducing any argument, clinical or experimental, classes "Progressive pernicious anæmia" as the chronic form of equine Pasteurellosis.

Delafond alone, in his first studies in the nature of the disease, took the care to differentiate the acute forms of this from anthracoid fevers and experimented by inoculating the blood of the sick animals to two horses and four sheep. "These six

were kept from 12 to 30 days, and not one of them contracted the disease." This note of Delafond's contains no reference to the quantity of blood inoculated nor to what became of the animals.

We also have tried to convey the disease experimentally in the horse by the inoculations of blood from diseased animals. Our first attempt was successful. A horse in superb health, inoculated in the jugular with 750cc. of defibrinated blood from a horse in the last stage of the disease, contracted a typical infection which determined in 57 days. During this time the animal lost 157kg. in weight, the number of red corpuscles fell from 7,800,000 to 5,700,000 (14th day), 4,095,000 (44th day), 3,500,000 (50th day), and 2,280,000 (day of death). Temperature, in general about 40°C., rarely below 39, was up to 41° on the 15th day. Autopsy: we found the ordinary lesions of anæmia in the horse: extreme muscular emaciation, subcutaneous, subserous, periglandular œdemas, hypertrophy of the spleen, hepatic cirrhosis, hæmorrhages of the bone marrow.

Also we have reproduced the typical disease in four other horses by intravenous and subcutaneous inoculations of doses of 5 to 200cc. of blood from three other diseased horses. All died, and all showed on autopsy the most typical lesions of natural infection.



Temperature curves of a horse killed 27 days after inoculation with infected blood.

The disease is transmissible to the horse indefinitely in series. By inoculating with the same virus we have made four successive passages, in the course of which its virulence was singularly exalted. The original animal succumbed in five months; the first inoculation killed in 60 days, the second in 42, the third in 27, the fourth in 26. With two other strains of virus we obtained similar results.

After inoculation with infected blood, whether in large or small dose, whether intravenous or subcutaneous, we got always a period of incubation varying from 5 to 9 days before the appearance of the initial rise of temperature; after that we had the ordinary signs of infection.

Inoculation with blood from a case of the chronic type provoked more often—not the slow, progressive type, but one corresponding to the acute or subacute type of a natural infection. Inversely, inoculation of a virulent blood to clean animals produces in them the slower, chronic type. In short the results of experimental inoculations show that the three forms result from one and the same infection to which the ancient denominations of Pernicious anæmia, Infectious or Epizoötic anæmia scarcely apply. We propose the name of *Infectious typho-anæmia*, which covers much better the various clinical aspects.

We have been greatly struck by the close resemblance in the symptoms of typhoid fever in the horse and of the acute forms of this *typho-anæmia*. Clinically, we are personally unable to distinguish differences between typhoid fever with no visceral localisations or principally gastro-intestinal, and infectious typho-anæmia of the acute type; also those of our *confrères* who have seen the acute form, experimentally induced, in our subjects have regularly diagnosed typhoid fever. Many veterinarians in the infected districts call it "influenza," "la grippe infectieuse," and "typhoid fever," and as we have said above, M. Lignières classified the chronic form as "equine Pasteurellosis." We are persuaded, from our own investigation and clinical observations, and from reading published works both in France and Germany on typhoid fever (influenza, Pferdestaupe, etc.), that in many instances there has been a confusion of morbid conditions arising from entirely different causes.

The published observations on the non-inoculability of typhoid fever in the horse, have, to our thinking, no proven value. The study of typhoid diseases of the horse, from the startpoint of inoculation of fresh horses with infected blood, has yet to be taken up. It is only on these lines that a little light can be shed on this so obscure group of typhoid infections.

(To be continued.)

VON BEHRING'S DEFENCE OF BOVOVACCINE.

Excerpts of Von Behring's publications, "Bovovaccination in Practice," taken from a separate print of a cyclus of lectures, published in the second booklet of "Communications of the Behring's works." Translated by Dr. WILFRED LELLMAN, Professor at New York University.

As an introduction to von Behring's publications, I wish to make the following statements:—I think it would not be fair, if a reply from von Behring on attacks upon his method of bovovaccination should be retained from our colleagues, who perhaps read only the *American Veterinary Review*. A discussion must not be one-sided. One cannot help gaining the impression that, ever since von Behring introduced bovovaccination into practice, quite a number of professional men claim not only the glory of having improved this method greatly, but also pretend that they were ahead of von

Behring as far as in originating his so-called Jennerisation method. However, the impartial observer cannot help admitting that many publications against von Behring's bovovaccination arise from personal animosity against the inventor or perhaps from personal feeling for themselves, *i.e.*, the wish of glorifying themselves.

Personal feeling of any kind should be entirely excluded when judging a method as for its efficacy and usefulness.

I wish to state that I have been experimenting with Bovovaccine for two years and a half, and that my experiments on quite a number of animals of the bovine species under my personal observation have proved to me beyond any doubt, that in bovovaccination we certainly have an immunising method against tuberculosis. It must be evident to every logically thinking man that immunity of equal degree cannot be produced in all vaccinated animals and that absolute immunity does not exist, and furthermore that a certain number of failures are liable to occur in practice, due to improper handling of the vaccine and lack of judgment.

I do not mean to say that the present method of bovovaccination could not be improved upon. I am sure it can, and I know it will be simplified in the near future as to its way of being used, and most likely with still a better prospect as to the immunising quality of the vaccine.

There could be added many more statistical figures to those already published; however, this would not materially change the general impression. Therefore, I shall confine myself to the statistics, which refer only to artificial infection of tuberculosis in vaccinated and non-vaccinated animals.

I am indebted to Vallée, the director of the renowned veterinary school at Alfort, for these experimental bovovaccination statistics. Following, I shall cite as literally as possible Vallée's report on a test made with 40 bovines and published by him in various journals. The passages which are here of interest read as follows in the German translation:

"On July 13, 1904, the Société de Médecine Vétérinaire Pratique readily accepted a proposition of the General Secretary, Mr. Rossignol, of Melun, to carry on an experiment with numerous animals, according to an accurately worked out test-plan, which would give us the means of obtaining a clear opinion as to the value of Behring's bovovaccination.

The experiment was commenced in September, 1904, and included the examination of the *innocuousness* of the method, its *efficiency*, and, should these be proven, the *duration* of the produced immunity.

Behring's Bovovaccine is marketed in small tubes; it is a yellowish powder consisting of dry bacilli of the human type, which are still capable of infecting guinea-pigs. (1) The operator has to prepare the vaccine by emulsifying it thoroughly in sterilized water.

In Melun, we have vaccinated only animals which proved to be healthy after having submitted to a proper tuberculin test. These animals were carefully protected during the experimental period from any possible spontaneous infection, and stabled in a disinfected place where thus far no cattle had been kept.

(1) However, the vaccines injected at Melun were, according to a test in which several accurately weighed off doses (three weeks prior to the expiration of their stated applicability) were found to be incapable of infecting guinea-pigs.

A year after the first vaccination and 9 months after the second, 15 of the vaccinated animals were dissected, 13 of them having previously been tested, and 2 without this test.

In none of these animals have we found even the slightest trace of a tuberculous change attributable to the preventive vaccination.

In April, 1905, a tuberculin test proved 4 bovovaccinated animals, kept at my Alfort laboratory, free from infection. Even more, the bronchial and mediastinal grands did not contain any bacilli, which was proven by test-inoculation into guinea-pigs. These glands would have been virulent, if the vaccines injected intravenously several months previous had been injurious.

On the basis of all these proofs, Rossignol and I have concluded that: "bovovaccination is harmless for animals which, during the time required for the completion of the immunity, are protected from all accidental infection."

Since the conclusions of the experiments at Melun, I have been able to ascertain, that Bovovaccine does not always possess the same degree of virulence for guinea-pigs. Consequently we must assume, that the results will not be invariably the same in cattle; it is therefore understood that, although the bacillus is of the human type, different results as to the harmlessness of the vaccine for guinea-pigs can be obtained by different experimentors.

In order to determine the resistance of the bovovaccinated cattle against tuberculosis infection, the animals were subjected, in various ways, to a control infection, three months after vaccination.

Two bovovaccinated and two new control animals were placed with cattle suffering from open tuberculosis. Six bovovaccinated and six control animals were infected by intravenous inoculation of 4 milligrams each of a highly virulent bovine bacillus. Seven other bovovaccinated, together with seven control animals, were vaccinated subcutaneously with bovine tubercular matter. The result of these test-series, 170 days after the control infection, was:

A.—*Test-series of Subcutaneous Control Infection.*

(1) Extensive lesions of the prescapular lymphatic gland in the seven control animals and in one vaccinated animal.

(2) Dissemination of the infection over the lungs in five controls, while the inner organs of all bovovaccinated animals are free from tuberculosis.

B.—*Test-series of Intravenous Control Infection.*

(1) Death of three of the six controls, 29, 34, and 37 days respectively after the test, from very extensive miliary tuberculosis.

(2) Upon killing the three remaining, highly diseased, control animals, they show generalised tuberculosis.

(3) The bovovaccinated animals at the time of slaughtering were found perfectly healthy clinically and did not even show rises in the temperature during the months following control infection. In two of them, there were found only 2—4 minute tubercles in the bronchial glands; in all of them, the lung tissues were found to be perfectly free from tuberculosis.

C.—*Test-series of Natural Infection Conditions.*

(1) In the bovovaccinated animals which were not killed, a very slight reaction to tuberculin.

(2) In the control animals, pronounced tuberculin reaction, and upon dissection severe tuberculous changes of the intestinal organs and of the lungs.

The report proves under all circumstances, that in bovovaccination itself we have a method of checking tuberculosis. This method which proved itself efficient upon scientific experimental basis, was introduced into practice about five years ago.

But I have already intimated, that even in the event of an unfavourable result of Vallée's experiments, nothing contrary would have been proved against my Jennerization method in the opinion of scientific investigators.

In connection with my explanations regarding the virulence determination of different types, I have de-

monstrated to you, what enormous multipla of the deadly minimal dose may be contained in fractione of a milligram of my Taurin culture.

Snpposing I claimed having detected a method of immunising guinea-pigs against 100 times the amount of the fatal minimal dose of my Taurin, would my claim be questioned seriously, if, nevertheless, some one should succeed in causing a fatal infection in one of my immunised guinea-pigs by using thousand or hundred thousand times the amount of the fatal minimal dose of my Taurin?

There are people to whom the question of the relative degree of immunity is still a puzzle Judging the question, whether an immunising method is of practical value, our opinion ought not to be governed by the idea that we may yet succeed in infecting an animal artificially by the virus against which it was immunised. It certainly means a great progress if we succeed in protecting the majority of the vaccinated animals against the dangers of infection to which they are continuously exposed.

The idea that a method of preventive vaccination must confer absolute immunity in order to be of practical use might have been pardonable twenty years ago, before it had been proven, through the serum therapeutical researches, that we must cease to consider the terms "immune" and "susceptible," absolutely disharmonising contrasts. There is no absolute immunity, neither does there exist an absolute susceptibility. There are only graduated differences in the degree of reaction upon the introduction of infectious material; and if we bear in mind practical immunisation, then our opinion regarding the utility of a preventive method must not depend upon the theoretical demands of academicians, but we must content ourselves with what is attainable at the present time.

To-day, it must be considered as a sign of scientific retrogression if, for instance, Moussu in the *Semaine Medicale* bases his unfavourable criticism of bovovaccination upon the indisputable statement that through a sufficiently severe experimental infection bovovaccinated animals will succumb to tuberculosis, and that in agricultural practice at times localised tuberculosis can be found in the animals bovovaccinated according to my method.—*American Veterinary Review.*

MEAT INSPECTION IN EDINBURGH.*

During the year the inspection of meat has been carried out on the same critical lines as within recent years. Although the consumption of meat, owing to the ever-increasing population, tends towards an increased amount, it is, despite this fact, noteworthy, that the number of animals dealt with at the City slaughter-houses are continuing to show a gradual decrease. This is quite apparently due to the large amount of foreign meat imported, which, year by year, shows a substantial increase. This will be evident on looking at the details of the past three years' imports, from which it appears that in 1903 the total number of foreign carcases imported was over 43,000, in the following year over 48,000, while in 1905 there were slightly over 50,000. In the year now under report, the total number of foreign carcases imported to this city was 52,550.

This quantity included large numbers of cattle brought from abroad, slaughtered at Birkenhead, and forwarded to the Dead-Meat Sales in this city. It also includes the chilled and frozen beef from Argentine and the States, which, alone, represents between two and three thousand cattle, and there is, further, included the very substantial and ever-increasing quantity of boneless meat. This latter has, during the year, engaged very special attention, and not only have the wholesale stores been kept under constant supervision, but quantities of it have periodically been taken and submitted to the University Authorities for Bacteriological examination.

There have been received 10,000 packages, each weighing about ½cwt., and altogether representing a quantity of about 250 tons, or, otherwise, representing from 1000 to 1200 carcases.

During the Autumn, a slight set-back took place in the quantity of this material imported, apparently in conrequence of a disinclination on the part of the public to use none other than home-fed beef at the time of the recent tinned-meat scare. The effect of that scare, however, appears now to have largely passed away, and, in consequence, the increased importations of boneless meat have again asserted themselves.

It has, upon former occasions, been pointed out in several reports which have been forwarded to your Council, that there is so much difficulty in connection with the inspection of this material as practically to render it impossible to state definitely what any particular package may exactly consist of. Only negative results have up to now been obtained even by bacteriological examination.

As it appears certain that the trade in this description of meat will increase, unless some restriction be placed upon it, it is well to again point out that, under existing conditions, the public in this country must practically depend upon its inspection at the port of shipment, as so little in the way of a satisfactory inspection can be carried out on its arrival here.

All refrigerated and frozen meat is taken to the various stores in Fountainbridge, while the fresh, port-killed meat is, on arrival, conveyed to the dead-meat sale yards. These, and the other various stores, have been inspected several times daily. At the slaughter-houses, a Veterinary Inspector has remained in constant attendance during hours of slaughter, and all animals have been subjected to an examination both during life, and also after slaughter has been carried out.

In Table I., as usual, there are set forth details in regard to the number of animals dealt with at the slaughter-houses, also the total number seized, together with the weight of such condemned carcases. From the various other Tables will be gathered full details in reference to diseased conditions which were found present in condemned carcases, and special information in connection with the all-important question of tuberculous carcases, and the extent of its infiltration.

As in past years, the butchers' shops, provision shops, fish and fruit shops, have been visited in regular rotation, and also those places where food is prepared for sale, such as sausage factories, fish-curing stores, etc. While, as a rule, such inspections have been carried out during the day, there have also been periodic night inspections, especially in the poorer districts of the city. In addition to the ordinary shops, fish restaurants and such like places have also received attention.

The seizures made as a result of this branch of the work are also incorporated in tabular form.

Some few years ago a considerable number of diseased live animals were seized in the fat stock sales, in conformity with a useful provision contained in the Public Heath (Scotland) Act, 1897. Very substantial fines were imposed upon the persons responsible for such, with the result that now, there is almost never cause to complain of the class of animals exposed for sale in these places. The improvement noted in last year's report has been fully maintained during the past year, and, indeed, it was found necessary to make only one seizure during the whole of that period.

*Extract from Annual Report of Sanitary and Markets Departments for the year 1906.

REPORT ON SAMPLES OF BONELESS BEEF AND FROZEN BEEF, RECEIVED FROM DR. MAXWELL WILLIAMSON, CHIEF SANITARY INSPECTOR, PER MR. W. G. BARNES, M.R.C.V.S., Inspector.

"University of Edinburgh,
Usher Institute of Public Health,
February 7, 1907

"On cutting into the portions of beef sent, they were found to be uniform throughout, and there was no indication of detached pieces being pressed together. The flesh seemed quite sound in appearance, and showed no sign of disease. On cutting sections, the fibres of all the samples were found to be more brittle than in samples of fresh steak purchased in Edinburgh. This brittleness is produced by the freezing Pieces taken from the interior of the samples were in all cases bacteriologically examined, with the results stated in Table.

These micro-organisms, which may all be found in soil, gain access to the beef after slaughter and before freezing. Though their growth is prevented by freezing they are not killed. It will be seen that I found them in samples of the best steak, purchased in Edinburgh. All the samples of boneless beef and frozen beef showed signs of putrefaction earlier than the steak purchased in Edinburgh. This is probably due to the presence in the beef of these micro-organism for a longer period of time. The spores of the bacillus of butyric acid are very difficult to kill by heat, and in many methods of preserving meat in tins by exposure to heat, the temperature is not sufficient to kill them. When tinned meats so preserved are found putrid, these spore-bearing organisms are generally the cause of the change.

(Signed) CHARLES HUNTER STEWART."

TABLE II.

Showing the Diseases found in the Carcases seized in the Slaughter-houses and throughout the City.

Disease.	Cows	Bulls	Bullocks	Heifers	Calves	Pigs	Sheep	Totals
Tuberculosis	31	7	46	5	...	1	...	90
Decomposition	7	...	3	...	9	1	47	67
Œdema	1	...	1	...	1	...	13	16
Enteritis	7	...	2	...	45	1	25	80
Emaciation	2	...	3	...	...	...	36	41
Pyrexia	9	...	1	...	...	...	3	13
Metritis	2	...	...	...	...	...	...	2
Septicœmia	16	...	...	...	...	...	...	16
Pneumonia	7	...	...	...	...	...	...	7
Asphyxia	2	...	1	...	...	3	3	9
Traumatism	1	...	...	...	...	...	6	7
Anthrax	1	...	1	...	...	...	...	2
Pericarditis	2	...	...	...	...	...	...	2
Pyæmia	1	...	...	...	...	...	1	2
Dystokia	1	...	...	...	...	...	...	1
Pleurisy	...	...	...	...	...	...	1	1
Peritonitis	7	...	1	...	...	...	1	3
Urticaria	...	...	...	...	...	1	...	1
Anasarca	1	...	...	...	...	...	...	1
Totals	92	7	59	5	55	7	136	361

Pure Milk.—Lady, to new milkman—"Now, Mr. Jones, I hope I can rely upon the purity of your milk. I had to give up Mr. Smith because his milk was watery."

Mr. Jones—"You can rely on this milk, mum, as it has been paralysed by the public anarchist."—*Scottish Farmer.*

ON LIGATURES AND BURIED SUTURES, WITH SPECIAL REFERENCE TO CATGUT.

By A. E. JOHNSON, M.B., CH.B. VICT., F.R.C.S. ENG. Surgical Registrar, Royal Infirmary; Tom Jones Surgical Scholar, Victoria University, Manchester.

The application of the ligature was described by Celsus about B.C. 50 and by Galen in the second century, A.D. Antyllus, who probably lived about the fourth century, made use of ligatures in his operation for aneurysm, and Paulus Ægineta (A.D. 600) also applied them. In the dark Middle Ages there are no records of their use, and the name of Ambroise Paré is always associated with their revival about 1570. When the use of the ligature in amputation wounds first occurred to him he conferred with Estienne de la Rivière, and other Parisian surgeons and they agreed to make a trial of it, having the cautery ready to hand in case the ligature should fail. In 1785 Hunter first performed the operation of ligature of an artery for the cure of aneurysm. The frequent occurrence of secondary hæmorrhage was shown by J. F. D. Jones in 1805, by experiments on the lower animals, to be due to the ligatures not having been applied tightly enough. His experiments went to show that permanent closure of the artery depended on the circular laceration of the inner and middle coats. "He also advised the use of small round firm ligatures instead of the thick and broad threads, tapes, ribbons, reserve ligatures, cylinders of cork, wood, or linen and other clumsy contrivances, after the use of which secondary hæmorrhage was remarkably frequent." Jones at the same time unfortunately stated that if the ligature were only left on the artery a few hours the vessel became impervious. This led to the use of temporary ligatures which were removed at intervals varying from six to 32 hours. Pulsation practically always returned, and Travers, their chief advocate in this country, abandoned their use, and the practice of temporary ligature was soon given up. Under the operative methods prevailing at the beginning of the nineteenth century we hardly expect to find that the experiment of cutting both ends of the ligatures short was free from complications. The practice had a short life and was only employed when it was known that the wound could not be brought together or that it must inevitably suppurate freely.

In the year 1814 Physick of Pennsylvania again introduced the animal ligature. I say again introduced, because catgut is mentioned by Galen as a substitute for silk and other ligatures which might not be obtainable, but curiously enough he recommended it as a material little liable to "decompose," so that to Physick belongs the honour of introducing absorbable ligatures as such. Animal ligatures were used very widely. Physick used ligatures made of chamois leather, Jamieson of Baltimore, used strips of untanned buckskin, Hartshorn pieces of parchment, Eve strips of tendon, McSweeny, of Cork, silkworm gut, and in 1817 we meet with the following passage from the pen of Sir Astley Cooper:—"My friend, Mr. Lawrence, has proposed that the silk usually employed for ligatures should be cut off close to the knot, so as to heal the wound over it; it has occurred to me that catgut would answer the purpose better and I shall give the result of the trial which I have made. . . . ." Sir Astley Cooper then reports a case of popliteal aneurysm in a man, aged 80 years, treated successfully by ligature of the femoral artery with catgut. But these ligatures only remained in use for a short period, because they occasionally softened before the artery was properly sealed. Metallic ligatures were suggested but were never widely used. Then for many years surgeons preferred to put their trust in silk or hempen ligatures, allowing one or both ends to hang out of the wound.

In 1876 at the International Medical Congress held at Philadelphia, Lister, in the course of an address on Antiseptic Surgery, stated that he had been making strenuous efforts to improve the catgut ligature and that he had at last made a mixture of carbolic acid, glycerine, chromic acid, spirit of wine, and water which gave the requisite degree of hardness to the gut. In 1878 Ogilvie Will, in ignorance of Lister's statement two years before, published a method of hardening catgut by immersion in carbolic acid and glycerine, and later in a mixture of chromic acid, acetic acid, and water. Macewen also used chromicised catgut ligatures in 1878. In 1881 Lister, in his inaugural address as President of the Clinical Society of London, stated that the catgut ligature had in some respects exceeded his original hope. It had proved very satisfactory in ordinary surgical proceedings but not in the ligation of large arterial trunks nor in Cæsarean section, in some of which cases it had been absorbed too rapidly with fatal results. He then gave details of the method of preparation of his chromic catgut ligatures. He immersed 200 lengths of catgut on the stretch for 48 hours in a solution of chromic acid 1, distilled water 4000, and carbolic acid 200. They were then dried and placed in 1 in 5 carbolic oil. They proved resistant and retained their strength. One year later Lister announced that he found his thick chromic catgut ligatures were more prone to superficial infiltration and he advised the following method of preparation. Immerse the gut for 12 hours in a 1 per cent. solution of chromic acid in water, and later 12 hours in sulphurous acid (B.P. strength). The foundation was thus laid for the use of the resistant catgut ligature. Numerous experiments have been performed since that date and various methods have been introduced.

Mr. A. W. Gerrard, of Messrs. Cuxson, Gerrard, and Company of Birmingham, with great care prepared specimens under my directions for a further series of experiments, and after many trials I found what seems to me a very simple method of preparation.

The object I had in view was to obtain such a specimen as would last between two and three weeks and would be suitable for the general routine of surgical work. The method which I find yields the best results at the least amount of expense and trouble is carried out at follows. Immerse one gross of ten feet lengths for one hour in a 1 in 1000 solution of potassium bichromate in water; remove the gut, wipe it, and stretch it on frames to dry. To obtain a more durable catgut, lasting about six weeks, the solution used should contain 1 per cent. of potassium bichromate and the length of immersion should be one hour as before. The quantity of solution is of no importance. Mr. Gerrard has estimated for me the percentage of bichromate in solution after the process and finds it unaltered. The solution must not be used a second time, however, as some change takes place in it on standing for a few hours, perhaps through the action of a small amount of organic matter dissolved from the gut. The bichromate was estimated by its oxidation power on ferrous sulphate in the presence of sulphuric acid, using ferricyanide of potassium as indicator. The hardening process is most conveniently and economically carried out by manufacturers on a large scale.

Iodine catgut is quite satisfactory with regard to its absorbability where a period of from six to ten days only is required, but I will refer to this preparation again when dealing with the sterilisation of catgut. Formalin catgut is also a most admirable preparation and I found it satisfactory. Most commercial preparations are very resistant, lasting as a rule from about 8 to 12 weeks or more, but may be used for such operations as the radical cure of hernia, etc.

Catgut is to be had all over the world in abundance, and is extremely cheap; for these reasons alone it is the most suitable of the animal ligatures, provided it can be relied upon. I have not the opportunity for gaining experience of the material best suited for ligation of the large arteries in continuity, and the subject involves so many considerations besides those belonging to general surgical work, that I will venture no opinion as to the best ligature to employ. However, I strongly advise that catgut be more widely used; for ligatures and buried sutures, plain catgut, or the slightly hardened bichromate catgut, and for such purposes as the radical cure of hernia a more resistant and stronger material, such as formalin catgut or the harder bichromate gut which I have described. Thus only may the patient be safe from any further trouble from this source after leaving the surgeon's care.

There is only one condition to be attached to the routine use of catgut, and that is that the surgeon must be certain of its sterilisation. For this purpose it is at least desirable that the sterilisation be carried out by someone who can be trusted and is known to the surgeon. Another essential is that the method should be simple, inexpensive, and easily carried out, and that there should be no chance of contamination of the material after it has been sterilised. To fulfil these conditions it is better that the gut should never be interfered with between the time of its sterilisation and the time that it is used in an operation. Any method of storage which involves constant withdrawals from the same stock is objectionable on this account alone. In conducting experiments on the sterilisation of animal ligatures I have always considered that those methods which aim at this end by means of chemical antiseptics are inferior to those in which heat is the agent employed. I was convinced that practically all surgeons with an aseptic technique would also prefer a method of sterilisation by heat to any chemical disinfection.

Prepared from the small intestine of sheep by twisting into cords the specially prepared submucous coat, catgut is bound to be a septic material, and it requires thorough treatment to render it aseptic. It must be admitted that many eminent surgeons use catgut which has been disinfected by prolonged immersion in carbolic acid solutions and have found it perfectly satisfactory. Iodine catgut is also very popular at present. The usual agent employed is about a 1 per cent. solution of iodine in potassium iodide and water. When kept in this solution the gut becomes brittle and it has been suggested to store it in dry sterile vessels or in alcohol after eight days' immersion in the iodine solution. To my mind it is objectionable on account of its odour and the way in which it stains the hands, linen, and tissues. It is, however, only fair to state that it has proved aseptic (in fact antiseptic) in the hands of many surgeons, and Mr. Mayo Robson informs me that he has now abandoned his xylol process and uses iodine catgut with the greatest satisfaction.

Many methods of employing heat to sterilise catgut have been devised. It has been sterilised by means of dry heat, which process is very elaborate and leads to difficulty in storing. It has been boiled in water after being over-hardened, but catgut so prepared is objectionable owing to the change in its resistance to living tissues, and the difficulty there is in determining the time it takes to be absorbed. It has been heated in olive oil. It has also been heated in various volatile substances—notably in alcohol, xylol, turpentine, cumol, etc. Alcohol was used in 1890 by Fowler, who sealed up suitable lengths in strong horseshoe-shaped glass tubes. Jellett used a metal cylinder containing alcohol in 1896, and in 1898 Mayo Robson adopted a similar cylinder, using xylol. Alcohol boils at 78 C. and xylol at 140° C.

I have used various strengths of alcohol and have found that although methylated spirit and other diluted forms have been recommended by various authors, the

catgut is always profoundly changed and only the over-hardened preparations will stand such treatment. By watching the process in glass tubes it soon became evident that some of the hardening agent is always dissolved out of the gut by boiling in these weaker preparations of alcohol. Absolute alcohol must therefore be used, which is objectionable owing to the cost. Xylol is very cheap, and acts equally well, and a mixture of equal parts of absolute alcohol and xylol may also be used. All these methods of applying heat, when the gut is inclosed in a vessel with these volatile substances, are efficacious in rendering the catgut sterile. If the cylinder is working well (which many who have tried the method will admit is more often the exception than the rule) and the gut is used direct from the cylinder no objections can be raised, but this is hardly practicable. I therefore suggest that the only absolutely safe method is to keep the material hermetically sealed in glass tubes until required for use. For this purpose I have for about two years sealed up animal ligatures in tubes containing xylol or a mixture of xylol and absolute alcohol and then heated the tubes in water. They were first tried by Mr. William Thorburn in his private practice and were later introduced at the Manchester Royal Infirmary. I will describe the method of preparation, so that if anyone should be tempted to adopt it he may be saved the trouble of working out the details and will be enabled to attain the result at the least possible cost.

Suitable glass tubing, with an outside diameter of one centimetre, and the thickness of the glass being not more than one millimetre, should be chosen. It is sold in five feet lengths, but should be delivered in half lengths measuring two feet six inches. The tubing is washed thoroughly with water, and later washed through with methylated spirit to hasten the drying process. It is dried before the fire, and this takes some time to be thoroughly accomplished. The clean dry lengths are then sealed in the middle in the blow-pipe or ordinary Bunsen flame, leaving lengths of one foot three inches with one end sealed up. The open ends are rounded off by heating in order to facilitate the introduction of the catgut. Then with clean and perfectly dry hands, half a bank of catgut (about 5 feet) is rolled round two slightly separated fingers and is inserted into the tube and pushed to the closed end with a piece of glass tubing of a smaller diameter. Then from a pipette, a burette, or a measure glass sufficient xylol to cover the catgut completely is let in. When a sufficient number of tubes are ready (it is an advantage to prepare a large quantity at one time) they are sealed off in the blow pipe or Bunsen flame about one and a half inches above the level of the xylol, leaving a sealed tube containing catgut and xylol and another tube sealed at one end only with which to repeat the performance. I have described these small details to show the most economical method of dealing with the tubing. For some time I used an ordinary Bunsen flome, but there is a distinct advantage in using the blow-pipe flame owing to the neater sealing and the great saving of time.

It might be thought that the process of sealing the tubes was not free from danger, and the alarming red labels on the tins of xylol from manufacturing chemists are calculated to encourage this belief. A slight explosion occurs in the tube during the sealing precess on many occasions, but it is not at all alarming as there is a free outlet for the gas and there is not the least degree of danger attached to the whole performance. The process is very easy and simple; I personally sealed off tubes for hospital use for about 12 months, and now the arrangement at the Manchester Royal Inkrmary is for the staff of nurses attached to the operating theatres to prepare and to fill the tubes and then the laboratory boy seals them off. In private I do the work myself, but the whole process can be carried out with ease by the sister in charge of Mr. Thorburn's private patients.

After sealing the tubes are placed in water in an upright position, which is maintained by arranging them in the pockets of a calico bag suspended in an instrument kettle. They are kept at 212° F. for from half an hour to an hour, varying with the thickness of gut, or they may be kept at 212° F. for about 20 minutes on each of two succeeding days, which is theoretically sounder, but in practice the continuous boiling has led to perfect results. The tubes have then to be filed about opposite the upper end of the folded gut and the tube is broken between pieces of sterilised lint when required at an operation. On extracting the gut with sterile forceps it is immersed in whatever lotion is being used and cut as required.

Though the process seems rather tedious and prolonged I can state that in preparing large quantities at a time it is so easily and expeditiously carried out that it is well worthy of a trial. The staff of nurses who have carried out my instructions inform me that they consider the work trifling compared with the continual preparatiou which was the rule before. The knowledge that there has been no interference with the gut since the process of sterilisation must also lift a great weight of responsibility from the minds of all taking part in a modern operation under aseptic principles, the success of which is as much a triumph of organisation as a personal achievement of the surgeon in charge, who of course has to bear the whole responsibility.

I have never succeeded in obtaining a culture from the specimens of catgut so prepared. I have smeared the gut with staphylococci, streptococci, and bacillus coli communis before the process was undertaken and have always found it sterile on trying to obtain a culture afterwards. The clinical results have also been satisfactory. The method is extremely cheap and the cost of the whole process is less than ½d. per tube, each tube with the catgut contained in it costing from 1½d. to 2½d., according to the variety of catgut used.

Mr. Thorburn has used it constantly in private and hospital practice and the results have been most gratifying. At the Manchester Royal Infirmary gut so prepared has been in constant use for over 12 months, and the huge increase in the amount of catgut used at that hospital—there has been three times as much used as before the introduction of this method of preparation—is sufficient guarantee of the satisfaction which it has given.

I am personally perfectly satisfied as to its sterilisation and it is with absolute confidence that I recommend it to the notice of the surgical world.—*Lancet.*

EXPERIMENTS ON ANIMALS.

The Royal Commission on Vivisection has just published a Blue Book of 158 pages, containing the evidence taken, October-December, 1906, price 1s. 4d., and to be bought of Wyman and Sons, Fetter Lane, E.C., or through any bookseller. The witnesses were (1) Mr. Byrne, principal clerk in the Home Office; (2) Mr. Thane, inspector under the Act; (3) Sir James Russell, assistant inspector; (4) Sir W. Thornley Stoker, inspector for Ireland; (5) and (6), Mrs. Cock and Dr. Snow, representing an anti-vivisection society: (7) Mr. Stockman, chief veterinary officer of the Board of Agriculture and Fisheries; (8) Dr. Starling, professor of physiology at University College. Thus we have in our hands a vast mass of evidence, 4,280 questions and answers, from four sources—the Home Office, the anti-vivisectionists, an expert in bacteriology, and an expert in physiology.

The evidence from the Home Office, 1,779 questions and answers, gives a very minute account of the construction and administration of the Act. We must bear in mind that the Act is thirty years old, that it was drafted in the dark days before bacteriology, and that it says not a word about inoculations, which at the present time are 90 per cent. of all experiments on animals. Therefore the Home Office imposes conditions not mentioned in the Act (2, 5-15). No operative procedure more severe than simple inoculation or simple venesection may be adopted without anæsthetics. An animal after inoculation shall be painlessly killed immediately the main result of the experiment has been attained, if it is found to be in pain which is either considerable in degree or likely to endure. All animals operated on under anæsthetics which are to be kept alive after recovery of consciousness shall be treated with strict antiseptic precautions, and if these fail and pain results the animal shall be killed immediately. Any subsequent operative procedures on such animals must be carried out under anæsthetics of sufficient power to preclude pain. These conditions will not be found in the Act; they are devised by the Secretary of State and printed or type-written conspicuously on a man's license.

Every application for a license or certificate under the Act is considered by four authorities: (1) Two of that small body of representative people who alone have the right to sign these applications; (2) the Association for the Advancement of Medicine by Research; (3) the inspector; (4) the Home Office. (In Ireland, the procedure is somewhat different. But the experiments made in that country are so few that we may confine our attention to Great Britain).

In thirty years four licenses have been revoked for misconduct. Slight contraventions of the Act, such as may fairly be called innocent, and are, indeed, inevitable, considering the quantity of the work and the complexity of the Act, occur, on an average, twice a year. On the whole subject of contraventions of the Act, we have the word of Mr. Thane, who has been inspector for seven and a half years, "I have not met with any deliberate opposition or wilful disregard of the Act."

But how can the inspectors know all that goes on? What is the good of two or three visits a year, as a safeguard against illegal practices? If an experimenter were in the habit of breaking the law, would he be detected? The answer is, that the vast majority of these known contraventions have been reported by the experimenters themselves, in all good faith, in their returns to the Home Office. (Q. 183, 483.) Again, we have Professor Starling's evidence, "Though I have been engaged in the experimental pursuit of physiology for the last seventeen years, on no occasion have I ever seen pain inflicted in any experiment on a dog or cat, or, I might add, a rabbit, in a physiological laboratory in this country; and my testimony would be borne out by that of anyone engaged in experimental work in this country." (Q. 3,451.) On more than one point, Sir Thornley Stoker was at variance with his colleague, Mr. Thane. Sir Thornley Stoker thinks that demonstrations are unnecessary, and that our future doctors can learn, without them, all that they need know. Mr. Thane thinks that students ought to see certain demonstrations; he mentions blood-pressure, the action of the vagus nerve on respiration, and its action on the heart. It appears, from Sir Thornley Stoker's evidence, that only eight demonstration-experiments were made in Ireland throughout the year 1905. (Q. 761, 804, 938.)

The operations with subsequent observation (certificate B, or B x E E, or B x F) are comparatively few in number, about 3 per cent. of all experiments. To their help we owe our present knowledge of cerebral localisation, our present treatment of myxœdema and sporadic cretinism, our use of adrenalin, and our present knowledge of pancreatic diabetes, and of certain important facts of digestion; and doubtless shall owe more in years to come. Mr. Thane gives instances why dogs, cats, or monkeys must sometimes be used; to study certain diseases peculiar to dogs, certain industrial diseases, certain parasites, and certain aspects of tuberculosis; also for the study of the nervous system, and the digestive system. Professor Starling also gives a list, and points out that practically the whole of our knowledge of the production of lymph in the body is derived from experiments on dogs. (Q. 1,205, 1,232, 3,445.)

One more question, arising out of the Home Office evidence, may be noted here. Is there need of more inspection? The answer seems to be that the Home Office does administer the Act very carefully, and endorses licenses and certificates with rules and restrictions, and scrutinises returns, and exercises a general surveillance over laboratories, but must leave the rest to the honour and the good feeling of the gentlemen whom it has licensed. "The people who hold a license," says Sir James Russell, "are all people of high character, as far as I can find out, and selected people; and, as I have said already, if I thought a man would treat the Act lightly, or rather I should say treat animals lightly, I would be no party to getting him a license." Sir Thornley Stoker, asked by Mr. Ram whether there ought to be more inspectors and more inspection, says "No. I do not think there are any abuses existing in Ireland; I do not think there is any concealment or anything that a dozen more inspectors could find out." And Mr. Thane, to the same question, says: "I do not think you would get any advantage by it. I do not think that any abuses are going on that you would stop. It would be only a satisfaction to the public, perhaps, but that is the only advantage it would be. (Q. 602, 967, 1,190.)

The public has a right to be satisfied. And it is certain that the licensees would not object to more inspection. The trouble is that the Anti-Vivisection Societies would hail a few more inspectors as a glorious victory on their side, a final proof that ghastly tortures are inflicted behind the doors of the laboratories.

The evidence of Mrs. Cook and Dr. Snow (Q. 1,780-2,422), representing an Anti-Vivisection Society, will hardly please those who are supporters of these societies. Dr. Snow appeared chiefly to say that in his opinion the Imperial Cancer Research Fund is working on the wrong lines. The present writer would be sorry to say anything disrespectful of Dr. Snow, but facts are facts. The unkind question had to be put to him, "Does the medical profession consider you as an authority on cancer?" And he had to say, "I am afraid not." Though he opposed the methods of the Cancer Research Fund, and their investigations into "Jensen's tumour," he had never seen that disease either in a mouse or under the micro-cope, and had not followed the modern work. "I am getting old. My knowledge is rather rusty. I am afraid I am getting very rusty now. I have never read the Act." These four answers make it plain that he had put himself in a false position. (Q. 2162, 2185, 2213, 2315, 2343).

Mrs. Cook, a literary lady who writes under the name of "Mabel Collins," represented the general character and arguments of the Anti-Vivisection Societies. She gave a long statement of very severe experiments, published in *The Journal of physiology* or elsewhere; but had taken no pains either to ask, or to find out for herself, what anæsthetics had been used. She spoke of experiments involving stimulation of nerves, but had not considered whether the nerve was stimulated toward the brain or away from it. She declared that severe operations, without anæsthetics, can be performed under a certificate which may be had for the asking. (Q. 1801, 2000-2007). She quoted the case of the operation on his Majesty the King as evidence that "the antiseptic treatment does not in any way lessen the pain of a

wound." (Q. 1801.) In her opinion, experiments to test cures for snake-bite, and the inoculation of rats with reference to the prevention of plague, were unjustifiable; it was even wrong to guard children against milk infected with tubercle by testing the milk on a guinea-pig. (Q. 1992, 1993, 2053). Her evidence, so far as it accused experiment of performing severe operations without anæsthetics, was referred by the commission to Prof. Starling, who had no difficulty in exposing its want of accuracy. (Q. 3496). She raised one or two questions of some interest, such as the gall-stones experiments in 1903, which she called very cruel, but they were painless—Q. 1650 1669); and the inoculations involving the cornea, which were made seventeen years ago; but her evidence must be read in the light of that exposure which was given to it by Professor Starling. We have no wish, here, to go outside the Blue-book, or to be unfair to Mrs. Cook and Dr. Snow. But the fact remains that their evidence was vague and inaccurate, and has, doutless, embarrassed the cause which it was intended to support.—*Daily Telegraph.*

A SPIRILLOSIS AND A HÆMATOZOAL DISEASE OF DOMESTIC FOWLS IN THE ANGLO-EGYPTIAN SOUDAN.

Preliminary Note.

The great interest which is at present being taken in tickborne diseases, and their importance both in veterinary and human pathology, must be my justification for publishing a short preliminary note on two diseases of this class affecting domestic fowls which have come under observation in Khartoum.

The first is a spirillosis, to all appearance identical both as regards symptoms and parasite with the spirillary septicæmia first described by Marchoux and Salimbeni in Brazil and on which much work has been done by Levaditi, both alone and in conjunction with Manouelian, by Borrel, and by several other observers. Its occurrence in the Soudan is of special interest because so far as I know it has not hitherto been recorded, save as a laboratory disease, outside Brazil and the Argentine, while the only other similar disease in birds is the spirillosis of geese in Transcaucasia described by Sakharoff in 1891. Another fact worth noting is that in the first instance I found the disease in fowls which had been recently imported from Italy, and which had embarked for Port Soudan at the port of Genoa. It is just possible that these birds during their transit to the Soudan may have acquired infection from being attacked by infected ticks brought on shipboard from South American ports. We know that ticks which have fed on infected fowls may remain capable of transmitting the disease for at least five months. On the other hand this spirillosis may really be endemic in Khartoum, where Argas ticks are exceedingly common. One observation favours this hypothesis, for it has been noted that a Soudanese hen which had been introduced by mistake into the infected fowlhouse exhibited spirilla in the blood two days after being placed in its new surroundings. Now, Marchoux and Salimbeni, as well as Levaditi, give the incubation period *after tick bite* as five or six days. The fowl had not been examined previous to its exposure to infection, so that it is possible that it was already a victim of the disease not hitherto recognised as attacking fowls in the Soudan. This is a point requiring early elucidation. The condition is now being studied, as a good deal of work is required before one can definitely say that the organism in question is really *S. gallinarum* (Laveran) and the disease the same as that commonly called Brazilian septicæmia.

The second disease I so far believe to be true piroplasmosis. It seems to be common amongst the fowls kept for sale in the Khartoum market, is certainly often fatal, and the unpigmented intracorpuscular parasites strongly suggest piroplasmata. They are best seen and studied when the blood is stained with a mixture of borrel blue and eosin, a process of coloration which brings out the ruby-red colour of the chromatin much better than does the Leishman or the Giemsa method. The symptoms of the disease are not at all unlike those of spirillosis. There is the same somnolent aspect, there is often diarrhœa, the feathers are ruffled, there is emaciation, weakness, and anæmia. The temperature curve is, however, probably quite different, and post-mortem there is no enlargement of the spleen or liver; and there appears to be a certain amount of renal congestion. The blood infection, apparently entirely intracorpuscular, may be very severe, and there is no doubt of its protozoal nature. Larvæ, of Argas ticks have been found on the infected fowls, and, as has been said, it is probable the disease is a true piroplasmosis. If so, I believe it is the first to be observed in birds. At a later date I hope to fully describe the parasite, the blood conditions, and the symptoms of a disease which is of very considerable importance in a land where there is a large trade in fowls and where these birds and their eggs form specially valuable articles of diet—as, indeed, is the case in most tropical countries.

I have since learned that cases of fowl spirillosis are being reported from various countries, and that the disease has been observed in Egypt, though apparently it has not been recorded in the literature.

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—*British Medical Journal.*

U. P. Civil Veterinary Department.

It is notified that a limited number of approved students will be sent annually for training to the Punjab and the Bengal Veterinary Colleges as scholarship-holders with a view to qualifying as veterinary graduates to fill the appointments on the subordinate staff of this department. The first lot of students will be sent in April of this year, and 12 will be sent to the Punjab and 3 to Bengal. Lectures and demonstrations are given in Urdu at the Punjab College and in English at Bengal. Candidates are requested to send in their applications through the head master of their school, who will be asked to nominate suitable men. Applications should state age, height, caste, and qualifications. Candidates will be required to have passed the Entrance or School Final Examination, but preference will be given to the latter. Age must be from 18 to 22, and a medical certificate of physical fitness will be required. The selected candidates will attend the course of College study for three years, during which time fees, cost of books, etc., will be defrayed by Government, and a stipend of Rs. 10 per mensem allowed to each student. The general conditions of employment of Veterinary Assistants are as follows:—On first appointment Rs. 30 per mensem which may rise to Rs. 40—50, and Rs. 60 after each five years of approved service, a fixed pony allowance of Rs. 10 per mensem is made to itinerating Veterinary Assistants. Veterinary Inspectors are generally selected from suitable senior Veterinary Assistants and receive Rs. 75 per mensem, rising to Rs. 120.—*Pioneer.*

DISEASES OF ANIMALS ACTS 1894 TO 1903. SUMMARY OF RETURNS.

Period.		Anthrax.		Foot-and-Mouth Disease.		Glanders (including Farcy)		Rabies. Cases Confirmed.		Sheep Scab.	Swine Fever	
		Out-breaks	Ani-mals.	Out-breaks	Ani-mals.	Out-breaks	Ani-mals.	Dogs.	Other	Out-breaks	Out-breaks.	Slaugh-tered *
GT. BRITAIN. Week ended April 27		36	60			17	34			8	57	269
Corresponding week in	1906 ..	14	70			25	36			1	47	307
	1905 ..	26	32			20	29			16	23	122
	1904 .	24	31			31	42			11	22	113
Total for 17 weeks, 1907 .. .		372	528			305	700			376	675	3471
Corresponding period in	1906 ..	332	519			367	683			267	361	1808
	1905 ..	361	517			392	719			605	222	1138
	1904 ..	338	460			488	907			998	426	2428
IRELAND. Week ended April 20		..	..	..	..	..	..	..	..	7	6	74
Corresponding Week in	1906 ..	..	..	..	..	..	..	..	..	2	4	19
	1905 ..	..	..	..	..	..	..	..	..	9	..	74
	1904 ..	..	..	..	..	..	..	..	..	4	4	95
Total for 16 weeks, 1907		1	3	..	..	..	..	..	..	145	48	811
Corresponding period in	1906 ..	2	2	..	..	2	7	..	..	125	13	233
	1905 ..	2	2	..	..	9	24	..	..	205	25	302
	1904 ..	2	2	..	..	3	18	..	..	317	62	866

Board of Agriculture and Fisheries, April 30. 1907.

Department of Agriculture and Technical Instruction for Ireland, (Veterinary Branch), Dublin, April 25, 1907.

NOTE.—The figures for the Current Year are approximate only. * As Diseased or Exposed to Infection.

LIVE STOCK IMPORT REGULATIONS.*

CANADA.—A Canadian Order in Council, dated Jan. 14th, 1907, provides new regulations for the importation of live stock into the Dominion, the regulations of March 30th, 1904 (published in this journal in March, 1905) being rescinded.

Permits.—Persons contemplating the importation of animals other than horses from any part of the world, except the United States and Newfoundland, must first obtain from the Minister of Agriculture a permit, stating the number and kind of animals to be imported, the country of origin, and probable date of shipment, the port of embarcation, the port at which the animals are to be landed, and the approximate date of their arrival, and such permit shall not be available at any port other than the one mentioned therein. Application for such permits shall be in writing and the statements in such applications may be required to be verified on oath. Animals from countries other than the United States and Newfoundland arriving at any port in Canada without such permit shall not be admitted unless and until ordered by the Minister.

Ports of Entry.—The importation into Canada of animals from all countries, other than the United States, Newfoundland, and Mexico is prohibited, except at the ports of Victoria, Vancouver, Quebec, Halifax, St. John, N.B., Charlottetown, P.E.I., and such other ports as may hereafter be indicated by the Minister of Agriculture.

All animals arriving in Canada through these ports shall be subject to inspection. All importers must certify under oath, before making Customs entry, the place of origin of the animals imported by them. Importers of animals will be required to certify under oath that the certificates hereinafter referred to apply to the animals which they purport to describe and to no other, and that the district named is the actual one from which the said animals came.

Diseased Animals.—Any animals affected with any contagious or infectious disease, imported or introduced into Canada, shall be forfeited and may be forthwith destroyed or disposed of as the Minister may direct.

Horses, Mules, and Asses.—Horses, mules, and asses imported from countries other than the United States, Newfoundland, and Mexico, must be accompanied by the certificate of a qualified veterinarian and of the local authority of the district whence they came, stating that no glanders, "maladie du coit," or other serious infectious or contagious disease affecting horses has existed in the said district for a period of six months prior to their shipment. Such animals, if consigned to Montreal, may be, if the Minister so directs, inspected at the port of Quebec during summer navigation; in absence of special direction of the Minister they must be inspected

* Live stock import regulations have been published in this Journal for the following countries:—United States, June, 1903, and Sept., 1906; Argentina, Jan., 1905, April, 1905, Oct., 1905, and June, 1906; New South Wales, April, 1905: Germany, May, 1905; New Zealand, June, 1905; South Australia, July, 1905; France, Aug., 1905; Belgium Sept., 1905; Uruguay, Oct., 1905; Victoria, Nov., 1905; Spain, Dec., 1905; Queensland, Jan., 1906; Western Australia, Feb., 1906; Tasmania, March, 1906; Transvaal June, 1906; Ceylon, Cape Colony, Sept., 1906; Holland, Malta, Oct., 1906; Natal, Austria-Hungary, Nov., 1906; Russia, Hungary, Dec., 1906; Iceland, Italy, India, Feb., 1907; Isle of Man (sheep), Ireland, March, 1907.

at the port of Montreal. Such animals landing at any of the other ports named shall be inspected at such ports.

Cattle.—Cattle imported from countries other than the United States, Newfoundland, and Mexico must be accompanied by the certificate of a qualified veterinarian and of the local authority of the district whence they came, stating that no contagious pleuro-pneumonia, rinderpest, or foot-and mouth disease has existed in the said district for a period of six months prior to their shipment. A quarantine of sixty days shall be enforced upon cattle imported from the United Kingdom, the period of quarantine counting from the date of clearance of the vessel carrying them.

Sheep and Goats.—Sheep and goats imported from countries other than the United States, Newfoundland, and Mexico must be accompanied by the certificate of a qualified veterinarian and of the local authority of the district whence they came, stating that no foot-and-mouth disease has existed in the said district for a period of six months prior to their shipment. A quarantine of thirty days shall be enforced upon sheep and goats from countries other than those mentioned.

Swine.—Swine imported from countries other than the United States, Newfoundland, and Mexico must be accompanied by a similar certificate to the foregoing, that no hog-cholera, swine plague, or foot-and-mouth disease has existed in the district whence they came for a period of six months prior to their shipment. The period of quarantine enforced upon swine from such countries is thirty days.

Regulations of Quarantine.—Cattle six months old and over, imported from countries other than the United States and Mexico, shall not be discharged from quarantine until they have been submitted to the tuberculin test. Cattle reacting to the test, but not showing clinical symptoms, shall be permanently marked in the right ear with the letter "T" by the officer making the test, and may then be released at the expiry of the prescribed period of quarantine if found free from all other infectious or contagious diseases. Cattle showing clinical symptoms of tuberculosis shall be destroyed or otherwise disposed of as the minister may direct.

The expenses of feeding, treating, and providing for animals detained in quarantine, with the exception of those for the use of grounds and shelters, shall be borne by the owner or importer.

Animals for Exhibition.—Animals, other than swine, may be admitted for purposes of exhibition only, on inspection at the port of entry, subject to the usual Customs regulations.

JAMAICA.—According to The Animals Contagious Diseases Laws, 1890-98, all horses, cattle, sheep, goats and swine from the United Kingdom (and some other places) which the consignee shall declare in writing to be imported into Jamaica for breeding purposes only, shall, on arrival, be examined by the inspector, who is empowered to cause the slaughter of any animals found to be diseased. If found free of disease, such animals may be imported without having to undergo quarantine.

If it is uncertain whether the animals are free of disease, they are to be taken, with the consent of, and at the expense and risk of the consignee, to an appointed place of quarantine, and there detained until the inspector certifies that they are free of disease, and in his judgment not calculated to introduce disease.

If the consignee does not enter into such an agreement, the animals shall be treated as foreign animals and shall be placed in quarantine for a period of not less than fourteen days, and not be released until the inspector certifies them to be free of disease and not calculated to introduce disease.

ISLE OF MAN.—According to a proclamation dated 29th January, 1907, any person desiring to import swine into the Isle of Man from the United Kingdom shall make an application to the Chief Constable of the island at least seven days before the date of importation. Such application must contain a statement of the ages, colour, sex, appearance, and condition of the swine, and must be accompanied by an affidavit from the person whose property the swine have been during the previous three months that they have not been in contact with any swine affected with swine fever during the preceding six months.

No swine may be imported without the written permission of the Chief Constable, and the importer must give twenty-four hours' notice, in writing, to the collector of customs and the Chief Constable, of the port at which he proposes to land the swine, and of the boat by which he proposes to import them.—*The Journal of the Board of Agriculture.*

PARLIAMENTARY.

In the House of Lords, Monday, April 29th.

MEDICAL PRACTICE BY COMPANIES.

Lord HYLTON moved the second reading of the Prohibition of Medical Practice by Companies Bill. The object of the Bill was to prohibit persons who were not by examination and registration legally qualified to practise medicine and surgery from carrying on business as medical practitioners by means of companies formed under the Joint Stock Companies Act, under the shelter of which they were able to evade liabilities attaching to them as individuals. It had been found possible under the existing law for a medical practitioner whose name had by direction of the General Medical Council been erased from the Medical Register for crime or misconduct to form himself into a company and continue practising as a doctor with impunity. The Bill accordingly declared that whatever would be an offence under the Medical Acts when committed by an individual should also be an offence when committed by a number of persons formed and incorporated into a company. In 1900 Lord Chancellor Halsbury inserted into his Companies Bill two clauses which, in the opinion of the General Medical Council, would have put a stop to this practice, but unfortunately in the House of Commons the clauses were struck out for the reason that they were not germane to the Bill. He hoped their Lordships would, in the interest of an honourable profession and for the protection of the poor, among whom these bogus medical companies mainly practised, read the Bill a second time.

The Earl of HALSBURY supported the Bill.

The Earl of CREWE said that this Bill met something which, in the opinion of the Government, nearly approached a public scandal—namely, the possibility of evasion by unqualified persons of the law relating to medical practice. In one respect it was excedingly drastic, because it not only dealt with proceedings by unqualified people, but it also prevented the formation of companies who would employ qualified doctors. That strong provision was defended on the ground that a doctor should be personally responsible for his acts, and not be able to shelter himself behind any company. (Hear, hear.) The kind of doctor who would allow himself to be employed by a company would be one of the derelicts of the profession, and it was just as well not to encourage this sort of practice by companies.

The Bill was read a second time and referred to a Select Committee.

DENTAL COMPANIES (RESTRICTIONS OF PRACTICE) BILL.

Lord HYLTON, in moving the second reading, said this Bill differed from the last in that this measure proposed to allow companies to practise dentistry provided

the members or the managers and assistants were duly-qualified dentists.

The Earl of CREWE agreed it would be a hardship to prevent these dental companies from being formed provided they empl yed properly-qualified and registered men.

The second reading was agreed to and the Bill referred to a Select Committee.

DESTRUCTIVE INSECTS AND PESTS BILL.

Earl CARRINGTON moved the second reading of this measure. It was intended, he explained, to grapple with several matters of importance to the agricultural world, and in particular with the disease called the gooseberry mildew, about which so many questions had recently been asked in the House of Commons. The Bill provided that the Board of Agriculture might make such orders as were thought fit to prevent the introduction or spread of any particular insect, fungus, or other pest destructive to agricultural or horticultural crops, or to trees or bushes. It gave the Board power to regulate the landing of plants and to authorise the removal or destruction of any diseased plant. Local authorities might pay compensation for any crops or trees so destroyed.

The Bill was read a second time.

Magistrate and "Vet."

Mr. Horace Smith made some very strong observations in a charge of cruelty against a carman and a summons against his employer, James Rowland, of Lant Street, Borough, for causing a horse to be worked in an unfit state.

A veterinary surgeon, called by the Court, said that the animal was so lame from ringbone, etc., that it was quite unfit to be on the streets.

To rebut this and other evidence, the defendant Rowland called his veterinary surgeon. The witness said he looked after Rowland's horses, and saw the horse in question the day before it was stopped. He assumed that there was nothing the matter with it, as his attention was not specifically drawn to the fact that it was lame. He saw the horse walk, but did not examine it for soundness.

Mr. Horace Smith asked the witness to examine the animal then and there outside the court.

The witness returned after an examination, and admitted that the animal had a wound on the coronet, where it had "brushed" itself. He put it down to new shoeing. But in his opinion it was quite fit for work. He certainly would not stop it.

The Magistrate: Do you really mean to say that a horse in this condition—a lame horse—is fit for work in the London streets?

The Witness: There are degrees of lameness, and this horse is only slightly lame.

The Magistrate (warmly): Let me tell you that a horse which is lame at all is not fit to work. A veterinary surgeon who gives advice as you have done is, in my opinion, not worth employing. And let me further advise you to be more careful in giving evidence in future.

The defendant Rowland was fined £3.—*Morning Advertiser.*

De omnibus rebus—How to run de motor omnibus midout dat noisy schmell?

I foresee the day when you will alight from the Tube and be shot up in the air for the flying machine "connection." How will a tramcar that stops at every lamp-post, like a little dog out for a walk, compete with an airship that flies from point to point in a few minutes?—*Dagonet.*

Slaughter-house Methods.

With all due respect to the superior knowledge of our learned professors and others, the thought has often occurred to me, as a slaughterman, Have animals the sense of knowing anything of their surroundings? Hence, I think a little practical experience of some of your readers would be interesting. Some years ago, in Finchley, we had a stray lamb come home with ours, and, in keeping it until we found an owner, we got somewhat attached to it. We kept it for three years, and it became a decoy. As s on as the paddock gate was opened, it would bolt off down to the slaughter-house and take the sheep into the pens; but, during slaughtering proceedings, every opportunity it got, it would come out into the slaughter-house and have a look, and appeared to like being there. I have seen it go back to the paddock smothered in blood; again, I know a gentleman at Islington who kept a decoy sheep for ten or eleven years; this sheep, when the purchases arrived from the market, would be turned into the street, and it would immediately lead the way into the pens. Now, my argument is—if animals had the knowledge we are told they have, would these sheep, af er having seen some thousands killed, run right into the jaws of death? Would they not run right away from it?—H.G.—*Meat Trades Journal.*

Corrupting a Carter.—First Penalty under the New Act.

The first case under the Prevention of Corruption Act, 1906, was heard at Manchester, when Daniel McLean, a clerk, was fined twenty shillings and ordered to pay ten guineas extra costs for giving a railway company's carter money to take cloth from the premises of his employers to another place at which he (the carter) had no occasion to call on the business of the railway company. Counsel said the prosecution was taken with the consent of the Attorney-General. He contended that the carter was an agent within the meaning of the Act, and that the payment to him constituted the offence of corruption by the defendant.—*News of the World.*

A "Dangerous" Dog.

In the King's Bench Division, before Mr. Justice Channel, this action was brought by the plaintiff and his wife to recover damages for injuries to the female plaintiff caused by a dog kpet by the defendant attacking and biting her while entering her house in Vauxhall Bridge Road.

Mr. Justice Channel, in summing up the case to the jury, pointed out that the main question as to whether the plaintiffs were entitled to succeed depended on whether the defendant was keeping a dog which he knew was ferocious. The law was, that a man was not liable for keeping a dog which he believed was perfectly harmless if from some cause or other it caused damage; but that after it had once caused damage he was liable if he chose to keep it and it afterwards did damage. The plaintiff had to show not merely that the dog had bitten her, but that the defendant knew he was keeping a dangerous dog. The usual way of proving that was by showing that the dog had bitten some one else previously. It was quite true that it was not only the owner of the dog who was liable, but also anyone who kept it. There was little doubt but that this dog had previously bitten the plaintiff's little girl, but the quesiion was whether that tact had been brought to the knowledge of the defendant; the fact that complaint had been made to the defendant's predecessor was not sufficient to fix liability on the defendant. The most important evidence as regards this point was the conversation which the

plaintiff said she had with the defendant a fortnight after he acquired the business, when she told him that the dog had bitten her little girl. But this conversation was entirely denied by the defendant; therefore it was for the jury to say whether they believed the evidence of the plaintiff or the defendant.

The jury retired, and, after an interval, returned with a verdict in favour of the plaintiffs for £15, being £11 for the husband and £4 for the wife.—*Times.*

Shooting a Cat.

In the King's Bench Divisional Court, the Lord Chief Justice and Justices Phillimore and Darling had before them an appeal in the case of Hooker *v.* Gray. The case came before the Court on an information under the Cruelty to Animals Act, 1849. It was stated that defendant one day last year saw his neighbour's cat sitting on his garden path. He secured a saloon rifle, and, "with intent to kill," shot the cat in the back, severely injuring it. The cat crawled into its owner's garden, where it had ultimately to be destroyed. The magistrates, on a decision in the case of Powell *v.* Knight, "reluctantly" dismissed the summons, and against this decision the appeal was brought, on the ground that the shooting was so unreasonable as to amount to cruelty, and that the intention to kill could not exonerate the defendant from a charge of cruelty. Mr. Bevan appeared for the appellant. Respondent was not represented.

Mr. Bevan contended that it was unlawful to shoot the cat with the intention to kill with a weapon that might or might not destroy it. He further said it was cruel to shoot the cat when others means were available for getting rid of the animal.

The Lord Chief Justice: You don't confine yourself to the contention that he should have taken a better aim? (Laughter.)

Mr. Bevan said it had been found in previous cases that unnecessary suffering caused even in the presence of an intention to kill was an offence against the Act.

The Lord Chief Justice, in giving judgment, said that, like the magistrates, the Court with great regret came to the decision they did in the case. He thought that they should not interfere with the decision, as the act complained of was not proved to be unlawful or cruel within the meaning of the Act.

The other judges agreed, and the appeal was dismissed.

Personal.

Mr. C. C. NESLING, M.R.C.V.S., of Framlingham, met with a nasty accident last Saturday afternoon. There was a sale of farming tackle, engines, etc., and many people had driven in to Framlingham to be present. Mr. Nesling was called to one of their horses, put up in the town, and found the animal down, and badly griped. There was difficulty in getting it up; it lashed out and kicked Mr. Nesling on the left arm, causing a compound fracture—the bone protruding through the skin. A doctor was in attendance quickly, but it was not set until Sunday afternoon—under chloroform. We understand that he is progressing satisfactorily.

JEFFRIES.—On April 28th, at Glenwood, Guildford, the wife of Henry Haywood-Jeffries, M.R.C.V.S., Lond: of a daughter.

Obituary.

JAMES CLARK, F.R.C.V.S., Conpar Angus.
Graduated, Edin: April, 1868.

WILLIAM LUCKEY, V.S., Haughley, Suffolk.
Mr. Luckey died on the 26th April at the age of 46.

CORRESPONDENCE.

MEAT INSPECTORS AND THEIR QUALIFICATIONS.

Sir,

In to-day's *Veterinary Record* I read with interest an article by you headed "Meat Inspectors and their Qualifications." You state the advertisement almost exactly as it *finally* appeared. Then you proceed as follows:—"On reading this I failed to see anything reflecting upon the Diploma of the R.C.V.S., *or anything suggesting an overvaluation of the other diplomas and certificates mentioned.* It seemed a carefully qualified description of the man wanted—a veterinary surgeon with special knowledge of pathology, hygiene, and meat inspection. The position was obtained by Mr. Thos. Parker, F.R.C.V.S., of Morpeth, *who held neither* of the extra certificates alluded to. My view of the innocence of this advertisement was not adopted by a contemporary, who saw danger in the mention of any other qualification save that of M.R.C.V.S., and devoted a leading article to the matter."

In the editorial page 131, *The Veterinary Journal*, March, 1907, the following appears:—"But what are we to think when members of the Royal College of Veterinary Surgeons are asked to produce such certificates."

Your statements, as far as your knowledge of the advertisements (of the post) inserted apparently allows you to go, are absolutely correct in my opinion; but, I must also add that in my opinion the writer of the (editorial) sentence I quote is also correct, and evidently armed with the required knowledge of the advertisements, although he does not quote them. From what I can gather from his sentence he means that because a veterinary surgeon does not hold the certificate of the Royal Sanitary Institute, or Diploma in Veterinary Hygiene of one of the Universities, he ought not to be debarred from competing for the post—although he may at the same time have the necessary qualifications—by practical training. For example, he may have had years of experience in that particular branch, and yet owing to that advertisement would not be allowed to apply for the post.

I will explain.

When first the advertisement appeared it read just as you stated, but the full stop came behind the word Institute and did not contain the following: "or produce other satisfactory evidence of proficiency in veterinary hygiene and sanitary science."

Desiring to apply, I wrote the M.O.H. asking if it would be worth my troubling to apply for the post as I didn't hold either of the certificates mentioned; but, as I held a higher (Fellowship) degree than any mentioned in the advertisement I was anxious to know whether my application would be considered. Very promptly I had a reply from the M.O.H. stating that my letter would be placed before his committee, and he didn't know how far his committee would feel bound to strictly adhere to the terms of the advertisement already inserted in the *local papers*. The result was that the committee, in order to be fair and just to all veterinary surgeons, no matter what other qualifications they possessed, decided to re-insert the advertisement, and consequently worded it in such a way (as in your article) that no qualified veterinary surgeon would be prevented applying for the post. As a result about 50 applications were sent in; this number was reduced to 10, then to four. The latter four were all Fellows and the only F.R.C.V.S. applying

On the Sanitary Committee, I may mention, there are no fewer than six medical men. Of the other three F.R.C.V.S. two were lecturers on Veterinary Hygiene in Science Colleges. To blow my own horn, I may mention that I was lecturing last year at the Armstrong College, University of Durham, and also acted as an examiner—on Veterinary Hygiene. I was awarded 1st prize for an essay on "Meat Inspection" by the London Veterinary College Medical Association: was bronze medallist in Hygiene when at college. My success in obtaining the appointment was due no doubt to some extent to my possessing certain of the likely qualifications, together with the fact that previous to

entering the veterinary profession I had already had about seven years practical experience as an ordinary butcher. Christmas, 1906, I was placed first in the list at F.R.C.V.S. examination. I had a fair amount of experience abroad, and I believe I was the author of the first original article illustrated by photos (*V.R.*, 1902) on Epizootic Lymphangitis. Had to do with Glanders, Rinderpest, Pleuro-pneumonia, etc., abroad.

However, to come back to the point, I can only say that you are right, and I also think "A contemporary" right, and I hope other public bodies will give every veterinary surgeon a proper chance by considering the qualifications of each man—and do their best, which I believe most public bodies are trying to do.—Yours sincerely,

Whitley Bay. THOMAS PARKER.

[We are pleased to have this letter from Mr. Parker, because it shows that Local Authorities quite know the value of veterinary qualifications and select the most suitable men irrespective of certificates.—ED.]

AN ANNUAL REGISTRATION FEE.

Sir,

In *The Veterinary Record* of April 13th, there is a letter referring to the above matter, signed by "Diogenes" in which he levels accusations against the veterinary profession of selfishness, and the average veterinary surgeon as being ignorant of histology—though your correspondent does not state whether animal or vegetable is implied. Possibly "Diogenes" is unable to differentiate.

Let me at once inform your correspondent that, as a body of men, veterinary surgeons will bear, in relation to their generosity, comparison with any other profession, whilst "individually" I have abundance of proof that acts of unselfish conduct in the daily routine of practice are not equalled in any other business capacity.

It is the outcome of childish ignorance that misleads men like "Diogenes" to assume that the veterinary profession is a selfish one merely because it fails to accept the proposal favourably for the payment of an annual registration fee from its members. Rather the reverse I take its non-acceptance by the majority as a sign of "unselfishness," because those who have sincere thoughts concerning the welfare of its members know—though I regret to have to say it—how financially weak a large proportion of practitioners are. "Diogenes" has evidently to learn "facts" regarding the profession, so that he may then be in a position to discriminate between unwillingness and inability.

My honest opinion is that the adoption of an annual registration fee would be one of the greatest curses that could fall to the lot—not always a happy one—of the veterinary surgeon. Neither the "bait" nor the wisdom of of "Diogenes" are advisable to tempt affluent members of the profession, to adopt a scheme towards strangling its less fortunate brethren.

Advocates in favour of this scheme frequently put forward the plea that the Incorporated Law Society compels the payment of an annual fee from solicitors, therefore why not do so with veterinary surgeons? Let me ask a simple question? How many of the legal profession are there that do not feel this annual fee as a torment? Certainly not a few, especially the younger ones, with little or no capital,

Your correspondent tells us that "veterinary surgeons care nothing about the political or scientific progress of their profession. Those who are capable of judging know that both of these offer almost unsurmountable difficulties, but I am at variance with "Diogenes" as to the comparative progress made in both directions.

Reverting to that portion of "Diogenes" letter as to the *average* veterinary surgeon's knowledge of histology (physiological or botanical) I am open to enter into competion with any man your correspondent likes to bring forth—medical or otherwise—at any time or place that he likes to name and give proof whether the *average* veterinary surgeon can give the "lie" direct or indirect to "Diogenes" and his supporters.—Yours faithfully,

F. T. B.

ADVERTISING.

Sir,

My attention has just been called to a letter, under the above heading, in your issue of the 27th ult., written by Mr. J. A. Thompson, of Lurgan. As I am the only Andrew A. Donnelly on the Register I presume he refers to me.

I left Lurgan last November and am now practising in Drogheda, so that it has taken Mr. J. A. Thompson six months to write his eight lined epistle about the use of the word Royal. Quite a drowsy performance.

Mr. J. A. Thompson evidently considers he is an authority on the use of the word "Royal" as he ventures his opinion that it is necessary to get permission "from another quarter." His opinion has a two-fold claim to our consideration—it is both vague and amusing.

Does Mr. J. A. Thompson mean that I should have obtained permission from an Orange Lodge, or from his mighty self? Did Mark Twain consult Mr. J. A. Thompson about calling the tragedy in "The Adventures of Huckle berry Finn" the "Royal Nonsuch?" Or to come nearer home, did Dunvilles obtain permission from Mr. J. A. Thompson to call their distillery "The Royal Irish Distillery," or their choice product "Royal Irish Whiskey?" If so, I shall consult Mr. J. A. Thompson when I am ordering new labels and, perhaps, he will also draw me a cow, as I must confess the old cow on the label appears to have taken too much Scotch and looks a bit groggy, or elated, or inebriated.

One more point. Mr. J. A. Thompson states that "this label is one of a series in use by me." This statement is untrue. Perhaps Mr. J. A. Thompson will now furnish *The Veterinary Record* with some of his labels. They are daisies and, like Charlie's Aunt, would make a cat laugh.—Yours faithfully,

ANDREW A. DONNELLY.

Drogheda, May 1.

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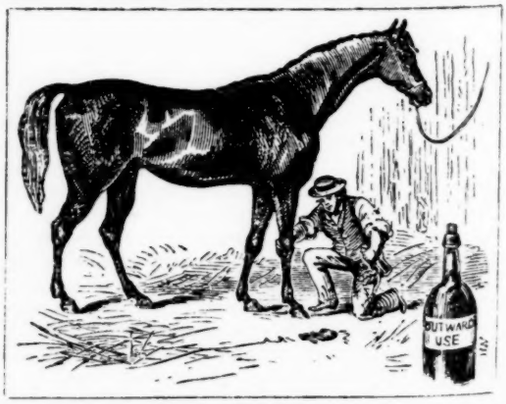

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